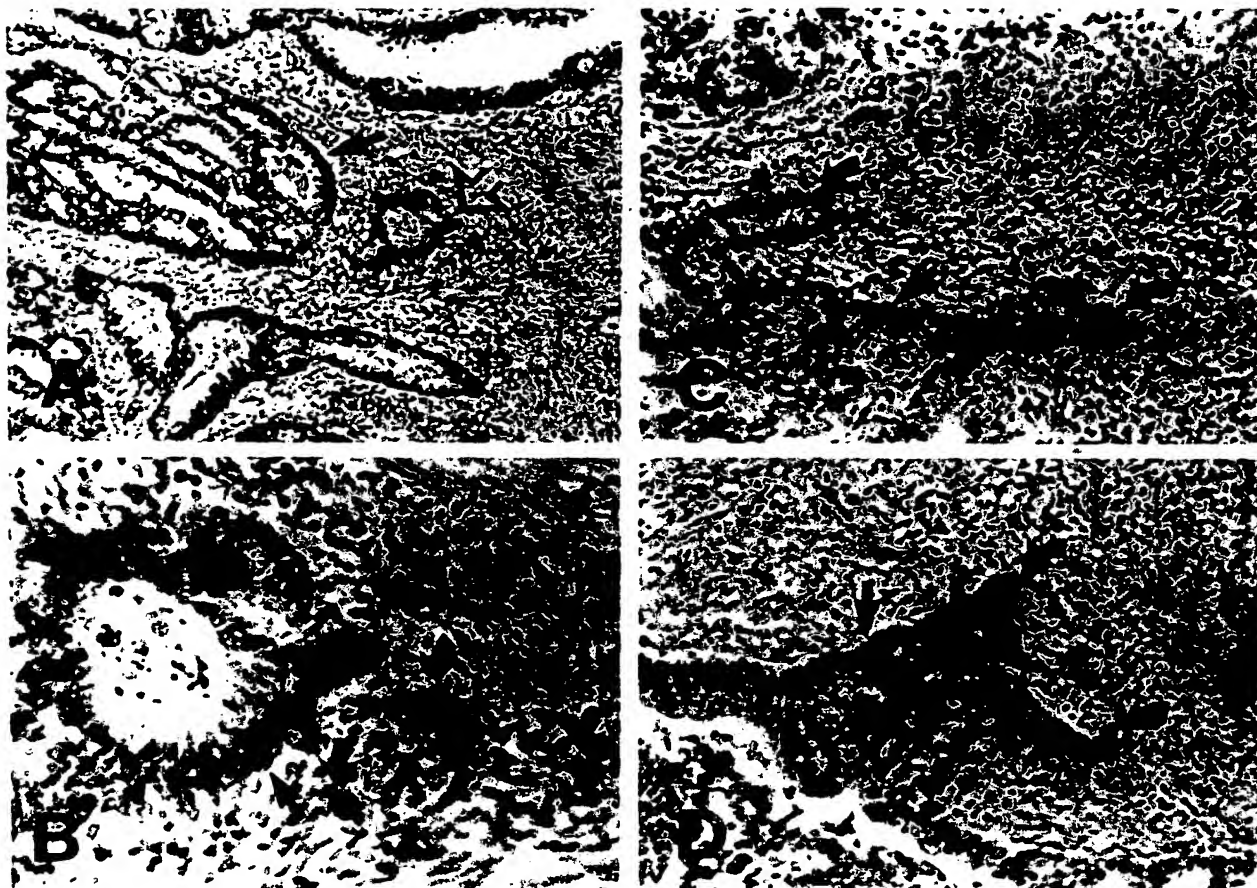


FIG. 1



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FIG. 2

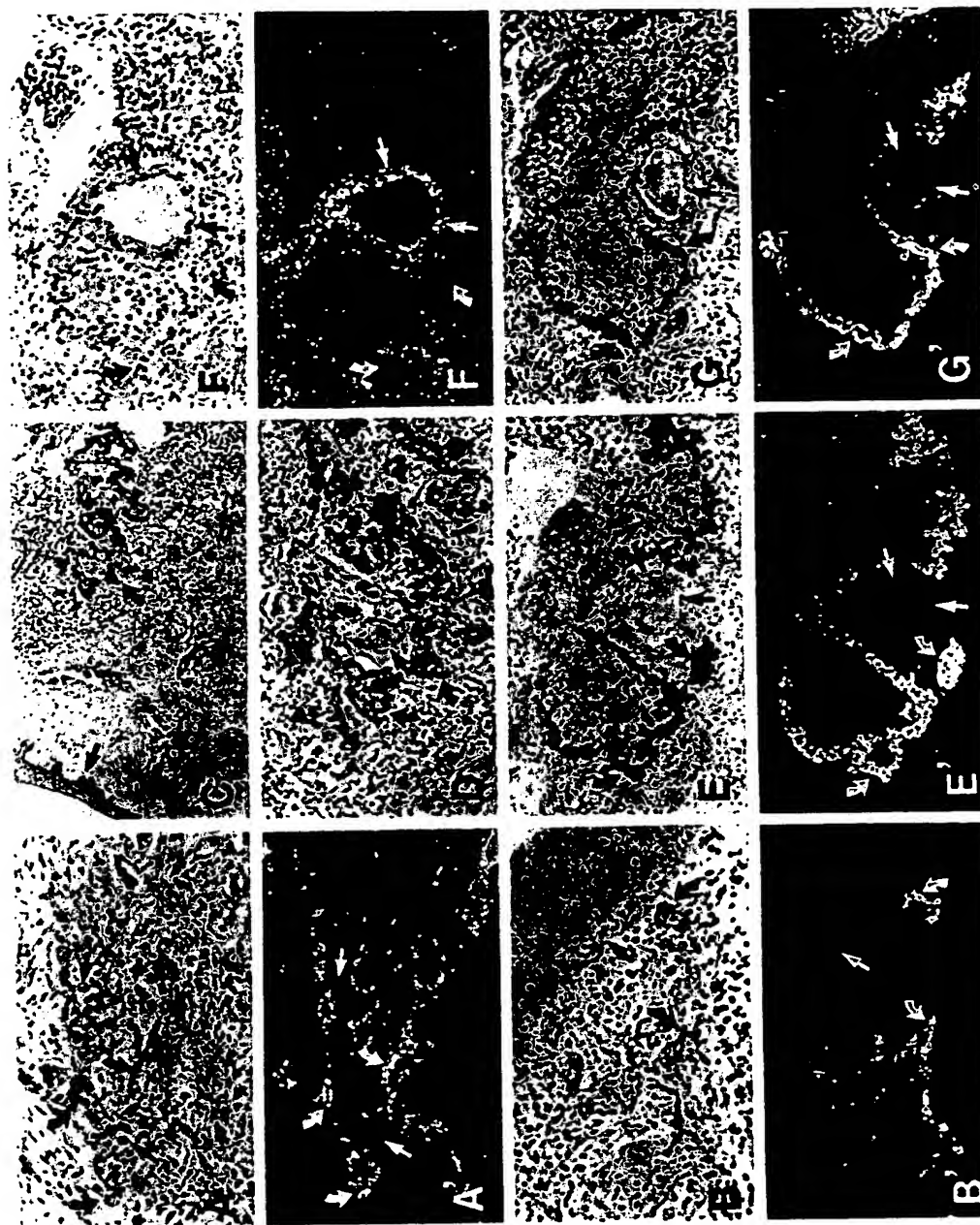


FIG. 3

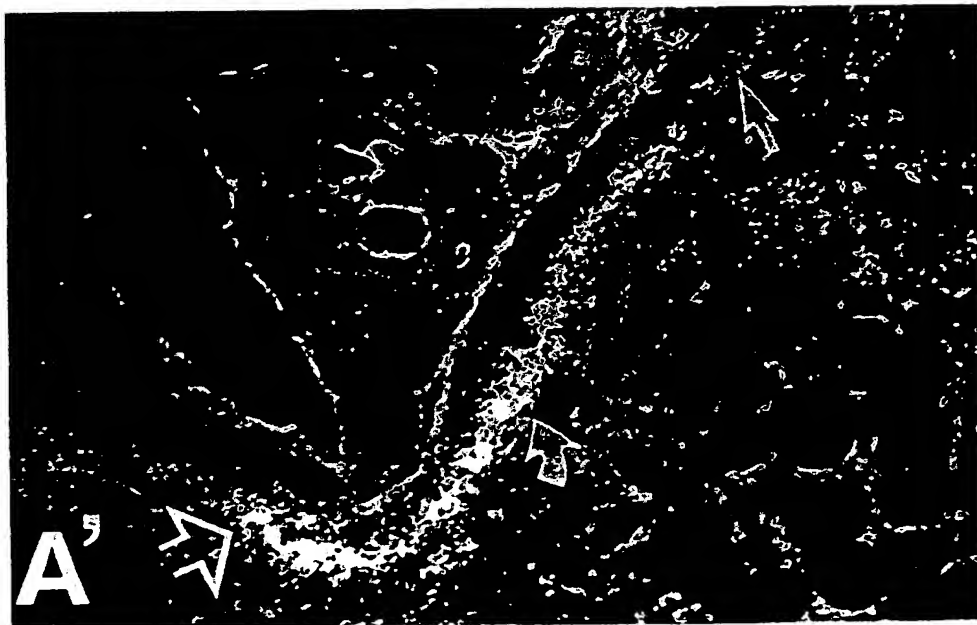


FIG 4A (SEQ ID NO.:12 & 13)

```

1 gaccacctga tcgaaggaaa aggaaggcac agcggagcgc agagtgaagaa ccaccaaccg
61 aggcgcgggg cagcgacccc tgcagcggag acagagactg agcggcccg caccgccatg
1
121 cctgcgctct ggctgggctg ctgectctgc ttctcgctcc tctgcccgc agcccggg==
2 P A L W L G C C L C F S L L L P A A R A
181 acctccagga gggaagtctg tgattgcaat gggaagtcca ggcaagtgtat ctttgatcgg
22 T S R R E V C D C N G K S R Q C I F D R
!⇒ Domain V
241 gaacttcaca gacaaactgg taatggattc cgctgcctca actgcaatga caacactgat
42 E L H R Q T G N G F R C L N C N D N T D
301 ggcattcact gcgagaagtg caagaatggc ttttaccggc acagagaaaag ggaccgctgt
62 G I H C E K C K N G F Y R H R E R D R C
361 ttgccctgca attgtaactc caaaggctct cttagtgttc gatgtgacaa cttcggacgg
82 L P C N C N S K G S L S A R C D N S G R
421 tgcagctgta aaccagggtg gacaggagcc agatgcgacc gatgtctgcc aggcttccac
102 C S C K P G V T G A R C D R C L P G F H
481 atgctcacgg atgcggggtg caccacaagac cagagactgc tagactccaa gtgtgactgt
122 M L T D A G C T Q D Q R L L D S K C D C
541 gacccagctg gcatcgagg gcccgtgtgac gcgggcccgt gtgtctgcaa gccagctgtt
142 D P A G I A G P C D A G R C V C K P A V
601 actggagaac gctgtgatag gtgtcgatca ggttactata atctggatgg ggggaaccc
162 T G E R C D R C R S G Y Y N L D G G N P
661 gagggctgta cccagtggtt ctgctatggg cattcagcca gctgccgcag ctctgcagaa
182 E G C T Q C F C Y G H S A S C R S S A E
!⇒ Domain IV
721 tacagtgtcc ataagatcac ctctaccttt catcaagatg ttgatggctg gaaggctgtc
202 Y S V H K I T S T F H Q D V D G W K A V
781 caacgaaatg ggtctcctgc aaagctccaa tggtcacagc gccatcaaga tgtgttttagc
222 Q R N G S P A K L Q W S Q R H Q D V F S
841 tcagcccaac gactagatcc tgtctatttt gtggtcctg ccaaatttct tgggaatcaa
242 S A Q R L D P V Y F V A P A K F L G N Q
901 caggtgagct atgggcaaaag cctgtccttt gactaccgtg tggacagagg aggcagacac
262 Q V S Y G Q S L S F D Y R V D R G G R H
961 ccattctgcc atgatgtgat cctggaaggt gctgggtctac ggatcacagc tcccttgatg
282 P S A H D V I L E G A G L R I T A P L M
1021 ccacttgcca agacactgcc ttgtgggttc accaagactt acacattcag gttaaatgag
302 P L G K T L P C G L T K T Y T F R L N E
1081 catccaagca ataattggag cccccagctg agttactttg agtatcgaag gttactgcgg
322 H P S N N W S P Q L S Y F E Y R R L L R
1141 aatctcacag cctccgcac ccgagctaca tatggagaat acagtactgg gtacattgac
342 N L T A L R I R A T Y G E Y S T G Y I D
1201 aatgtgaccc tgatttcagc ccgcccgtgc tctggagccc cagcaccctg ggttgaacag
362 N V T L I S A R P V S G A P A P W V E Q
1261 tgtatatgtc ctgttggtga caaggggcaa ttctgccagg attgtgcttc tggctacaag
382 C I C P V G Y K G Q F C Q D C A S G Y K
!⇒ Domain III
1321 agagattcag cgagactggg gccttttggc acctgtattc cttgtaactg tcaaggggga
402 R D S A R L G P F G T C I P C N C Q G G
1381 ggggcctgtg atccagacac aggagattgt tattcagggg atgagaatcc tgacattgag
422 G A C D P D T G D C Y S G D E N P D I E
1441 tgtgctgact gcccaattgg ttctacaac gatccgcacg acccccgcag ctgcaagcca
442 C A D C P I G F Y N D P H D P R S C K P
1501 tgtccctgtc ataacgggtt cagctgtcca gtgattccgg agacggagga ggtggtgtgc
462 C P C H N G F S C S V I P E T E E V V C

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FIG 4B

(SEQ ID NO.: 12 & 13)

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1561 aataactgcc ctccccgggt caccgggtgcc cgtctgtgagc tctgtgtgta tggctacttc
492 N N C P P G V T G A R C E L C A D G I F
1621 ggggaccctt ttggtgaaca tggcccagtg aggccttgtc agccctgtca atgcaacagc
502 G D P F G E H G P V R P C Q P C Q C N S
1681 aatgtggacc ccagtgcctc tgggaattgt gaccggctga caggcagggtg tttgaagtgt
522 N V D P S A S G N C D R L T G R C L K C
1741 atccacaaca cagccggcat ctactgcgac cagtgcaaaag caggctactt cggggaccca
542 I H N T A G I Y C D Q C K A G Y F G D P
1801 ttggctccca acccagcaga caagtgtcga gcttgcaact gtaaccccat gggctcagag
562 L A P N P A D K C R A C N C N P M G S E
1861 cctgtaggat gtcgaaagtga tggcacctgt gtttgcaagc caggatttgg tggccccaac
582 P V G C R S D G T C V C K P G F G G P N
1921 tgtgagcatg gagcattcag ctgtccagct tgctataatc aagtgaagat tcagatggat
602 C E H G A F S C P A C Y N Q V K I Q M D

!-> Domain I/II
1981 cagtttatgc agcagcttca gagaatggag gccctgattt caaaggctca ggggtggtgat
622 Q F M Q Q L Q R M E A L I S K A Q G G D
2041 ggagtagtac ctgatacaga gctggaagggc aggatgcagc aggcctgagca ggcccttcag
642 G V V Y S Q E L E G R M Q Q A E Q A L Q
2101 gacattctga gagatgcccc gatttcagaa ggtgctagca gatcccttgg tctccagttg
562 D I L R D A Q I S E G A S R S L G L Q L
2161 gccaaaggtga ggagccaaga gaacagctac cagagccgcc tggatgacct caagatgact
682 A K V R S Q E N S Y Q S R L D D L K M T
2221 gtggaagagag ttccggctctt gggaagtcag taccagaacc gagttcggga tactcacagg
702 V E R V R A L G S Q Y Q N R V R D T H R
2281 ctcatcactc agatgcagct gagcctggcg gaaagtgaag ctcccttggg aaacactaac
722 L I T Q M Q L S L A E S E A S L G N T N
2341 attcctgcct cagaccacta cgtggggcca aatggcttta aaagtctggc tcaggaggcc
742 I P A S D H Y V G P N G F K S L A Q E A
2401 acaagattag cagaaagcca cgttgagtca gccagtaaca tggagcaact gacaaggga
762 T R L A E S H V E S A S N M E Q L T R E
2461 actgaggact attccaaaca agccctctca ctggtgcgca aggccttgca tgaaggagtc
782 T E D Y S K Q A L S L V R K A L H E G V
2521 ggaagcggaa gcggtagccc ggacgggtgct gtggtgcaag ggcttgtgga aaaattggag
802 G S G S G S P D G A V V Q G L V E K L E
2581 aaaaccaagt ccctggccca gcagttagca agggaggcca ctcaagcgga aattgaagca
822 K T K S L A Q Q L T R E A T Q A E I E A
2641 gataggctct atcagcacag tctccgcctc ctggattcag tgtctccgct tcaggaggctc
842 D R S Y Q H S L R L L D S V S P L Q G V
2701 agtgcacagt cctttcaggt ggaagaagca aagaggatca aacaaaaagc ggattcactc
962 S D Q S F Q V E E A K R I K Q K A D S L
2761 tcaagcctgg taaccaggca tatggatgag ttcaagcgta cacaaaagaa tctgggaaac
882 S S L V T R H M D E F K R T Q K N L G N
2821 tggaaagaag aagcacagca gctcttacag aatggaaaaa gtgggagaga gaaatcagat
902 W K E E A Q Q L L Q N G K S G R E K S D
2881 cagctgcttt ccctgcccac tcttgctaaa agcagagcac aagaagcact gagtatgggc
922 Q L L S R A N L A K S R A Q E A L S M G
2941 aatgccactt tttatgaagt tgagagcatc cttaaaaacc tcagagagtt tgacctgcag
942 N A T F Y E V E S I L K N L R E F D L Q
3001 gtggacaaca gaaaagcaga agctgaagaa gccatgaaga gactctccta catcagccag
962 V D N R K A E A E E A M K R L S Y I S Q
3061 aaggtttcag atgccagtga caagaccag caagcagaaa gagccctggg gagcgtgct
982 K V S D A S D K T Q Q A E R A L G S A A
3121 gctgtgcac agagggcaaa gaatggggcc ggggaggccc tggaaatctc cagttagatt
1002 A D A Q R A K N G A G E A L E I S S E I
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FIG 4C

(SEQ ID NO.: 12 & 13)

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3181 gaacaggaga ttgggagtct gaacttggaa gccaatgtga cagcagatgg agccttggcc
1022 E Q E I G S L N L E A N V T A D G A L A
3241 atggaaaagg gactggcctc tctgaagagt gagatgaggg aagtgggaagg agagctggaa
1042 M E K G L A S L K S E M R E V E G E L E
3301 aggaaggagc tggagtttga cacgaatatg gatgcagtac agatgggtgat tacagaagcc
1062 R K E L E F D T N M D A V Q M V I T E A
3361 cagaaggttg ataccagagc caagaacgct ggggttacaa tccaagacac actcaacaca
1082 Q K V D T R A K N A G V T I Q D T L N Y
3421 ttagacggcc tcctgcatct gatggaccag cctctcagtg tagatgaaga ggggctggctc
1102 L D G L L H L M D Q P L S V D E E G L V
3481 ttactggagc agaagctttc ccgagccaag acccagatca acagccaact gcggcccatg
1122 L L E Q K L S R A K T Q I N S Q L R P M
3541 atgtcagagc tggaaagagag ggcacgtcag cagagggggcc acctccatctt gctggagaca
1142 M S E L E E R A R Q Q R G H L H L L E T
3601 agcatagatg ggattctggc tgatgtgaag aacttggaga acattaggga caacctggcc
1162 S I D G I L A D V K N L E N I R D N L P
3661 ccaggctgct acaataccca ggctcttgag caacagtga gctgccataa atatttctca
1182 P G C Y N T Q A L E Q Q *

3721 actgagggttc ttgggataca gatctcaggg ctcggggagcc atgtcatgtg agtggggtggg
3781 atggggacat ttgaacatgt ttaatgggta tgctcaggtc aactgacctg accccattcc
3841 tgatcccatg gccagggtgg tgtcttattg caccatactc ctgtcttccct gatgctgggc
3901 atgaggcaga taggcactgg tgtgagaatg atcaaggatc tggaccccaa agatagactg
3961 gatggaaaaga caaactgcac aggcagatgt ttgcctcata atagtcgtaa gtggagtcct
4021 ggaatttggg caagtgtgtg tgggatatag tcaacttatt ctttgagtaa tgtgactaaa
4081 ggaaaaaact ttgactttgc ccaggcatga aattcttccct aatgtcagaa cagagtgcga
4141 cccagtcaca ctgtggccag taaaatacta ttgcctcata ttgtcctctg caagcttctt
4201 gctgatcaga gtctctccta cttacaaccc aggggtgtgaa catgttctcc attttcaagc
4261 tggaaagaagt gagcagtggt ggagtgaagg cctgtaaggc aggccattc agagctatgg
4321 tgcttgctgg tgcttgccac cttcaagttc tggacctggg catgacatcc tttcttttaa
4381 tgatgccatg gcaacttaga gattgcattt ttattaaagc atttcctacc agcaaagcaa
4441 atgttgggaa agtatttact ttttcgggtt caaagtgata gaaaagtgtg gcttgggcat
4501 tgaagagggt aaaattctct agatttatta gtccataattc aatcctactt ttcgaacacc
4561 aaaaatgatg cgcataaatg tattttatct tattttctca atctcctctc tctttcctcc
4621 acccataata agagaatggt cctactcaca cttcagctgg gtcacatcca tccctccatt
4681 catccttcca tccatctttc catccattac ctccatccat ccttccaaca tatatttatt
4741 gagtacctac tgtgtgccag gggctgggtg gacagtggty acatagtctc tgcctcata
4801 gagttgattg tctagttagg aagacaagca tttttaaaaa ataaatttaa acttacaaac
4861 tttgtttgtc acaagtgggt tttattgcaa taaccgcttg gtttgcaacc tctttgtcct
4921 acagaacata tgttgcaaga cctcccatg ggcactgagt ttggcaagga tgacagagct
4981 ctgggttgtg cacatttctt tgcattccag cgtcactctg tgccttctac aactgattgc
5041 aacagactgt tgagttatga taacaccagt gggaattgct ggaggaacca gaggcacttc
5101 caccctggct gggaagacta tgggtgctgc ttgcttctgt atttcttgg attttctga
5161 aagtgtttctt aaataaagaa caattgttag atgccaaaaa //

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FIG 4D

(SEQ ID NO.: 14 & 15)

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3421 ttagacggcc tcctgcatct gatgggtatg tgaaccaca acccacaacc tccagctcc
1102 L D G L L H L M G M *

3481 atgctccagg gctttgctcc agaacactca ctatacctag cccagcaaaa ggggagtctc
3541 agctttccctt aaggatatca gtaaatgtgc tttgtttcca ggcccagata actttcggca
3601 ggttccctta catttactgg accctgtttt accgttgcta agatgggtca ctgaacacct
3661 attgcacttg ggggtaaaagg tctgtgggcc aaagaacagg tgtatataag caacttcaca
3721 gaacacgaga cagcttgga atcctgctaa agagtctggc ctggacctg agaagccagt
3781 ggacagtctt aagcagagga ataacatcac cactgtatat ttcagaaaaga tcactagggc
3841 agccgagtgg aggaaaagctt gaagaggggg ttagagagaa ggcagggtga gactacttaa
3901 gatattgttg aaataattga agagagaaat gacaggagcc tgctctaagg cagtagaatg
3961 gtggctggga agatgtgaag gaagattttc ccagtctgtg aagtcaagaa tcacttgccg
4021 gccgggtgtg gtggctcacg cctgtaattc tagcactttg ggagactgaa gcgggtggat
4081 cccccgaggt caggagtga agaccagcct ggccaacatg gtgaaaccct gtctctacta
4141 aaagtacaaa aattagctgg atgatggtgg tgggcgcctg taattccagc tactcaggag
4201 tctgaggcag gagaatcgct tgaaccacag aggcgaggtt acagtgaacc aagattgcac
4261 cactgctctt ccagcctggg aacagagaga ctgcctaaaa aaaaaaaaaa aaaaaa //

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